

By Express Mail # EV273338395US

**CLAIMS**

What is claimed:

1           1.     An oscillating motor comprising:  
2                 a cylinder which can be filled with a hydraulic medium, said cylinder  
3     having an inside wall with at least one rib extending radially inward;  
4                 a motor shaft supported in said cylinder with freedom to oscillate;  
5                 a sleeve concentric to said motor shaft;  
6                 at least one vane extending radially outward to said cylinder;  
7                 a pair of cylinder covers surrounding said motor shaft and forming working  
8     chambers between said cylinder and said sleeve;  
9                 a pair of ring-shaped spaces between said motor shaft and said cylinder;  
10                a pair of pressure-preloaded sealing arrangements in respective said ring-  
11     shaped spaces sealing off said working chambers; and  
12                an axial groove between said motor shaft and said sleeve, said axial  
13     groove forming a pressure equalization channel connecting said ring-shaped spaces.

1           2.     An oscillating motor as in claim 1 wherein said pressure  
2     equalization channel is machined in said motor shaft.

1           3.     An oscillating motor as in claim 1 wherein said pressure  
2     equalization channel is formed in said sleeve.

By Express Mail # EV273338395US

1                   4.     An oscillating motor as in claim 1 further comprising a connection  
2     which connects said pressure equalization channel to one of said working chambers.

1                   5.     An oscillating motor as in claim 4 wherein each said vane  
2     comprises a sealing strip which contacts said cylinder, said connection opening against  
3     said sealing strip, said sealing strip opening said connection to a working chamber as a  
4     function of pressure.

1                   6.     An oscillating motor as in claim 3 wherein said motor shaft  
2     comprises a pair of circumferential recesses which overlap respective said ring-shaped  
3     spaces.

1                   7.     An oscillating motor as in claim 1 wherein said sleeve carries said  
2     at least one vane.

1                   8.     An oscillating motor comprising:  
2                   a cylinder which can be filled with a hydraulic medium, said cylinder  
3     having an inside wall with at least one rib extending radially inward;  
4                   a motor shaft supported in said cylinder with freedom to oscillate;  
5                   at least one vane extending radially outward from said shaft to said  
6     cylinder;

By Express Mail # EV273338395US

7 a pair of cylinder covers surrounding said motor shaft and forming working  
8 chambers between said cylinder and said motor shaft;  
9 a pair of ring-shaped spaces between said motor shaft and said cylinder;  
10 a pair of pressure-preloaded sealing arrangements in respective said ring-  
11 shaped spaces sealing off said working chambers; and  
12 a first axial groove in each said vane connecting said ring-shaped spaces,  
13 said first axial groove receiving a sealing strip which seals off the working chamber.

1 9. An oscillating motor as in claim 8 further comprising a second axial  
2 groove which adjoins said first axial groove at a shoulder in each said vane, said sealing  
3 strip being supported on said shoulder.